



Zune HD

Price	\$219.99 ERP ^[1]
Capacity	16 gigabytes (GB) Up to 4,000 songs, or 5 hours of high definition video from Zune Marketplace, or 22 hours of video optimized for device, or 25,000 pictures ^[2]
Colors	Onyx Black
Size and Weight	Size: 52.7 mm x 102.1 mm x 8.9 mm (w x h x d) Weight: 2.6 ounces (74 grams)
Battery	Music, up to 33 hours (wireless off); video, up to 8.5 hours ^[3] Charge Time: Approximately 3 hours when connected to your PC, approximately 2 hours with A/C adapter
Screen	Size: 3.3-inch OLED color display, 16:9 aspect ratio Type: Scratch-resistant glass with touch input capability Orientation: Vertical (music) and horizontal (videos) Resolution: 480 pixels x 272 pixels
Wireless	Connectivity: 802.11b/g compatible
Wireless Sync	Yes Connectivity: 802.11b/g compatible Authentication modes: Open, WEP, WPA, and WPA2 Encryption modes: WEP 64- and 128-bit, TKIP, and AES
Audio Support	Windows Media® Audio Standard ^[4] (WMA) (.wma): Up to 384 Kbps; constant bit rate (CBR) and variable bit rate (VBR) up to 48-kHz sample rate. WMA Pro 2-channel up to 768 Kbps; CBR and VBR up to 48-kHz. WMA Lossless: 2 channel up to 768 kbps and 48 kHz. Advanced Audio Coding (AAC-LC) (.mp4, .m4a, .m4b) - .m4a and .m4b files without FairPlay DRM up to 320 Kbps; CBR and VBR up to 48-kHz. MP3 (.mp3) – Up to 320 Kbps; CBR and VBR up to 48-kHz.
Picture Support	JPEG – (.jpg)
Video Support	Windows Media Video (WMV) (.wmv) – Main and Simple Profile, CBR or VBR, up to 10.0 Mbps peak video bit rate; 720 pixels x 480 pixels up to 30 frames per second (or 720 pixels x 576 pixels up to 25 frames per second). Advanced Profile up to L2, 1280x720 up to 30 frames per second, CBR or VBR, up to 14.0 Mbps peak video bitrate. Zune software will transcode HD WMV files above stated capabilities at device sync. MPEG-4 (MP4/M4V) (.mp4) Part 2 video ^[4] – Simple Profile up to 4.0 Mbps peak video bit rate; 720 pixels x 480 pixels up to 30 frames per second (or 720 pixels x 576 pixels up to 25 frames per second). Zune software will transcode HD MPEG-4 files at device sync. H.264 video ^[4] – Baseline Profile + bframes, up to 10 Mbps peak video bit rate; 720 pixels x 480 pixels up to 30 frames per second (or 720 pixels x 576 pixels up to 25 frames per second). 1280x720 up to 30 frames per second, up to Level 3.1 and 14.0 Mbps peak video bitrate. Zune software will transcode HD WMV files above stated capabilities at device sync. DVR-MS ^[5] – Zune software will transcode at time of sync.
Audio Output	Analog Audio Out, Optical Digital Audio Out (requires additional dock, sold separately)
Video Output	HDMI or Composite (requires additional dock, sold separately)
Radio	Built-in FM/HD Radio™ receiver
Included Accessories	Headphones Zune Sync Cable Three pairs of foam earpiece covers
Ports	Connector port 3.5mm Headphone jack
Languages	English, French, Spanish



Zune HD

Price	\$289.99 ERP ^[1]
Capacity	32 gigabytes (GB) Up to 8,000 songs, or 10 hours of high definition video from Zune Marketplace, or 48 hours of video optimized for device, or 25,000 pictures ^[2]
Colors	Platinum Silver
Size and Weight	Size: 52.7 mm x 102.1 mm x 8.9 mm (w x h x d) Weight: 2.6 ounces (74 grams)
Battery	Music, up to 33 hours (wireless off); video, up to 8.5 hours ^[3] Charge Time: Approximately 3 hours when connected to your PC, approximately 2 hours with A/C adapter
Screen	Size: 3.3-inch OLED color display, 16:9 aspect ratio Type: Scratch-resistant glass with touch input capability Orientation: Vertical (music) and horizontal (videos) Resolution: 480 pixels x 272 pixels
Wireless	Connectivity: 802.11b/g compatible
Wireless Sync	Yes Connectivity: 802.11b/g compatible Authentication modes: Open, WEP, WPA, and WPA2 Encryption modes: WEP 64- and 128-bit, TKIP, and AES
Audio Support	Windows Media® Audio Standard ^[4] (WMA) (.wma): Up to 384 Kbps; constant bit rate (CBR) and variable bit rate (VBR) up to 48-kHz sample rate. WMA Pro 2-channel up to 768 Kbps; CBR and VBR up to 48-kHz. WMA Lossless: 2 channel up to 768 kbps and 48 kHz. Advanced Audio Coding (AAC-LC) (.mp4, .m4a, .m4b) - .m4a and .m4b files without FairPlay DRM up to 320 Kbps; CBR and VBR up to 48-kHz. MP3 (.mp3) – Up to 320 Kbps; CBR and VBR up to 48-kHz.
Picture Support	JPEG – (.jpg)
Video Support	Windows Media Video (WMV) (.wmv) – Main and Simple Profile, CBR or VBR, up to 10.0 Mbps peak video bit rate; 720 pixels x 480 pixels up to 30 frames per second (or 720 pixels x 576 pixels up to 25 frames per second). Advanced Profile up to L2, 1280x720 up to 30 frames per second, CBR or VBR, up to 14.0 Mbps peak video bitrate. Zune software will transcode HD WMV files above stated capabilities at device sync. MPEG-4 (MP4/M4V) (.mp4) Part 2 video ^[4] – Simple Profile up to 4.0 Mbps peak video bit rate; 720 pixels x 480 pixels up to 30 frames per second (or 720 pixels x 576 pixels up to 25 frames per second). Zune software will transcode HD MPEG-4 files at device sync. H.264 video ^[4] – Baseline Profile + bframes, up to 10 Mbps peak video bit rate; 720 pixels x 480 pixels up to 30 frames per second (or 720 pixels x 576 pixels up to 25 frames per second). 1280x720 up to 30 frames per second, up to Level 3.1 and 14.0 Mbps peak video bitrate. Zune software will transcode HD WMV files above stated capabilities at device sync. DVR-MS ^[5] – Zune software will transcode at time of sync.
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[1] U.S. estimated retail price; actual retail prices may vary

[2] Music estimates based on 128 Kbps WMA files with length of 4 minutes each. Pictures transferred to Zune will be optimized for Zune screen size; video estimates based on 500 Kbps WMV files with 128 Kbps WMA audio tracks.

[3] Battery life was tested by Zune in August 2009 using preproduction hardware and device software. Battery tests are conducted with specific Zune units. Actual results may vary. Audio content used was WMA 128 Kbps. Video content used was 320x240 WMV9 500 Kbps total bit rate. Batteries have a limited number of charge cycles and may eventually hold less charge. Battery life and the number of charge cycles vary by use and settings. See www.zune.net/batteries for more information.

[4] In MP4/M4V container format, Quicktime (.mov) files will transcode at time of sync.

[5] Standard definition TV recordings from Windows Media Center. HDTV and protected recordings not supported. Must be running Zune Software 4.0 on Windows Vista Home Premium or Windows Vista Ultimate, or Windows 7.

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